

Figure 3

Single Recess Geometry

Source → Drain

wsd

ws

wd

w

Lg

d

a

Gate

xg

x

Ohmic Contacts

Separation / μm wsd 2

Source width / μm ws 1.0

Drain width / μm wd 1.0

Schottky Contacts

Gate length / μm Lg .15

Gate position / μm xg .8

Recess Geometry

Width / μm w .52

Position / μm x .8

Depth / μm d .77E-03

Angle / degrees a 60

Inter-electrode Capacitances / fF

Cgsp 8.6 Cgdp 8.1 Cdsp 43 ☐ Auto

OK Reset Cancel

Figure 4



HEMT Active Layer

Layer	Material	Doping	Thickness
Layer 10	GaAs	Nd	6.00E18 500A
Layer 9	AlGaAs 25%	Na	1.00E14 480A
Layer 8	AlGaAs 25%	Nd	2.00E19 20A
Layer 7	AlGaAs 25%	Na	1.00E14 20A
Layer 6	InGaAs 22%	Na	1.00E14 140A
Layer 5	AlGaAs 25%	Na	1.00E14 30A
Layer 4	AlGaAs 25%	Nd	6.00E18 16A
Layer 3	AlGaAs 25%	Na	1.00E14 300A
Layer 2	AlGaAs 16.5%	Na	1.00E14 150A
Layer 1	AlGaAs 8.5%	Na	1.00E14 150A
Buffer	GaAs		3000A
Substrate	S.I. GaAs Substrate		

Edit Layers

Add Delete Insert Move Copy Reset

OK Cancel

Figure 5

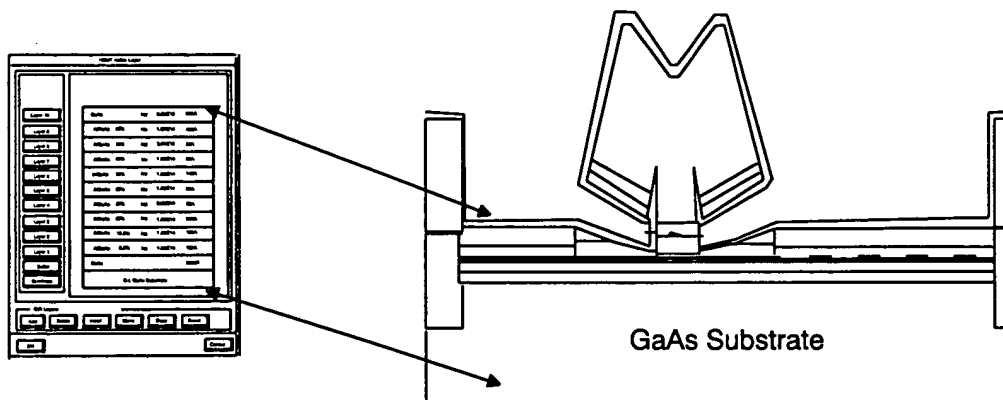


Figure 6